

Table updated 8/19/04 by the Department of Ecology

2004 Commercial Passenger Vessels Discharge Status and Wastewater Treatment

Vessel Operator	Vessel Name	Total Persons on Board ¹	Blackwater (BW) Treatment System Manufacturer	Graywater (GW) Treatment System Manufacturer	Discharging in Washington ² ≥ 1nm from berth and ≥ 6 knots		Discharging in Washington ² continuously (at berth or within 1 nm of berth)		Type of Treatment System
					BW	GW	BW	GW	
Celebrity Cruises	<i>Mercury</i>	2279	Biopure/Rochem	Mixed with BW	NO	NO	NO	NO	Rochem is a reverse osmosis ultrafiltration system.
Celebrity Cruises	<i>Summit (2)</i>	3409	Hamann/Lazarus	None	NO	NO	NO	NO	Hamann/Lazarus is dilution and filtration system
Holland America	<i>Amsterdam</i>	2107	Unknown	Unknown	NO	NO	NO	NO	
Holland America	<i>Ooesterdam</i>	2624	Rochem	Mixed with BW	YES	YES	NO	NO	Rochem is a reverse osmosis ultrafiltration system.
Holland America	<i>Veendam (1)</i>	1854	Zenon	Mixed with BW	NO	NO	NO	NO	Zenon is a biological reactor and ultrafiltration system.
Holland America	<i>Zaandam⁴ (1)</i>	2080	Zenon	Mixed with BW	NO	NO	NO	NO	Zenon is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Star</i>	4000	Scanship	Mixed with BW	YES	YES	YES	YES	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Sun (1)</i>	2952	Scanship	Mixed with BW	NO	NO	NO	NO	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Spirit</i>	3600	Scanship	Mixed with BW	YES	YES	YES	YES	Scanship is a biological reactor and ultrafiltration system.
Norwegian Cruise Lines	<i>Norwegian Wind³ (1)</i>	2428	Scanship	Mixed with BW	NO	NO	NO	NO	Scanship is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Diamond Princess</i>	3908	Hamworthy Biorector	Mixed with BW	NO	NO	NO	NO	Hamworthy is a biological reactor and ultrafiltration system.
Princess Cruise Line	<i>Sapphire Princess</i>	3908	Hamworthy Biorector	Mixed with BW	NO	NO	NO	NO	Hamworthy is a biological reactor and ultrafiltration system.
Radisson Seven Seas	<i>Seven Seas Mariner (1)</i>	1200	Hamworthy Biorector	Mixed with BW	NO	NO	NO	NO	Hamworthy is a biological reactor and ultrafiltration system.
Mariser Marine	<i>Universe Explorer (3)</i>	815	Unknown	Unknown	?	?	?	?	
Silver Sea	<i>Silver Shadow (3)</i>	740	Biopure/Marisen	Mixed with BW	?	?	?	?	
West Steamship	<i>Empress of the North³ (5)</i>	320	Orca	chlorine	?	?	?	?	Macerator Chlorinating System

(number of port calls scheduled)

highlighted = regular calls to Port in Washington for the 2004 season

highlighted = non NWCA lines and not subject to the MOU

¹Numbers come from the Alaska Discharge Status Report. Capacity is calculated from Registration, Vessel Specific Sampling Plan, or Juneau Cruiseship Schedule. Includes both passengers and crew. Actual number of passenger aboard varies dependent upon sales.

²Washington waters refers to the "waters subject to this Memorandum of Understanding (MOU)" as defined in the MOU signed April 20, 2004

³2003 information from the Alaska Discharge Status Report

⁴Called in Port Angeles